



OASIS SUPER INVERTER MULTI SERIES

Service Manual 2013

11MMFI-B-1211

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1. Precaution

1.1 Safety Precaution

- To prevent injury to the user or other people and property damage, the following instructions must be followed.

- Incorrect operation due to ignoring instruction will cause harm or damage.
- Before service the unit, be sure to read this service manual at first.

1.2 Warning

➤ Installation

- Do not use a defective or underrated circuit breaker. Use this appliance on a dedicated circuit.

There is risk of fire or electric shock.

- For electrical work, contact the dealer, seller, a qualified electrician, or an authorized service center.

Do not disassemble or repair the product, there is risk of fire or electric shock.

- Always ground the product.

There is risk of fire or electric shock.

- Install the panel and the cover of control box securely.

There is risk of fire of electric shock.

- Always install a dedicated circuit and breaker.

Improper wiring or installation may cause fire or electric shock.

- Use the correctly rated breaker or fuse.

There is risk of fire or electric shock.

- Do not modify or extend the power cable.

There is risk of fire or electric shock.

- Do not install, remove, or reinstall the unit by yourself (customer).

There is risk of fire, electric shock, explosion, or injury.

- Be caution when unpacking and installing the product.

Sharp edges could cause injury, be especially careful of the case edges and the fins on the

condenser and evaporator.

- **For installation, always contact the dealer or an authorized service center.**
- **Do not install the product on a defective installation stand.**
- **Be sure the installation area does not deteriorate with age.**

If the base collapses, the air conditioner could fall with it, causing property damage, product failure, and personal injury.

- **Do not let the air conditioner run for a long time when the humidity is very high and a door or a window is left open.**

- **Take care to ensure that power cable could not be pulled out or damaged during operation.**

There is risk of fire or electric shock.

- **Do not place anything on the power cable.**

There is risk of fire or electric shock.

- **Do not plug or unplug the power supply plug during operation.**

There is risk of fire or electric shock.

- **Do not touch (operation) the product with wet hands.**

- **Do not place a heater or other appliance near the power cable.**

There is risk of fire and electric shock.

- **Do not allow water to run into electrical parts.**

It may cause fire, failure of the product, or electric shock.

- **Do not store or use flammable gas or combustible near the product.**

There is risk of fire or failure of product.

- **Do not use the product in a tightly closed space for a long time.**

Oxygen deficiency could occur.

- **When flammable gas leaks, turn off the gas and open a window for ventilation before turn the product on.**

- **If strange sounds or smoke comes from product, turn the breaker off or disconnect the power supply cable.**

There is risk of electric shock or fire.

- **Stop operation and close the window in storm or hurricane. If possible, remove the product from the window before the hurricane arrives.**

There is risk of property damage, failure of product, or electric shock.

- **Do not open the inlet grill of the product during operation. (Do not touch the electrostatic filter, if the unit is so equipped.)**

There is risk of physical injury, electric shock, or product failure.

- **When the product is soaked, contact an authorized service center.**

There is risk of fire or electric shock.

- **Be caution that water could not enter the product.**

There is risk of fire, electric shock, or product damage.

- **Ventilate the product from time to time when operating it together with a stove etc.**

There is risk of fire or electric shock.

- **Turn the main power off when cleaning or maintaining the product.**

There is risk of electric shock.

- **When the product is not be used for a long time, disconnect the power supply plug or turn off the breaker.**

There is risk of product damage or failure, or unintended operation.

- **Take care to ensure that nobody could step on or fall onto the outdoor unit.**

This could result in personal injury and product damage.

➤ CAUTION

- **Always check for gas (refrigerant) leakage after installation or repair of product.**

Low refrigerant levels may cause failure of product.

- **Install the drain hose to ensure that water is drained away properly.**

A bad connection may cause water leakage.

- **Keep level even when installing the product.**

It can avoid vibration of water leakage.

- **Do not install the product where the noise or hot air from the outdoor unit could damage the neighborhoods.**

It may cause a problem for your neighbors.

- **Use two or more people to lift and transport the product.**

- **Do not install the product where it will be exposed to sea wind (salt spray) directly.**

It may cause corrosion on the product. Corrosion, particularly on the condenser and evaporator fins,

could cause product malfunction or inefficient operation.

➤ Operational

- **Do not expose the skin directly to cool air for long time. (Do not sit in the draft).**
- **Do not use the product for special purposes, such as preserving foods, works of art etc.**

It is a consumer air conditioner, not a precision refrigerant system.

There is risk of damage or loss of property.

- **Do not block the inlet or outlet of air flow.**
- **Use a soft cloth to clean. Do not use harsh detergents, solvents, etc.**

There is risk of fire, electric shock, or damage to the plastic parts of the product.

■ **Do not touch the metal parts of the product when removing the air filter. They are very sharp.**

- **Do not step on or put anything on the product. (outdoor units)**
- **Always insert the filter securely. Clean the filter every two weeks or more often if necessary.**

A dirty filter reduces the efficiency of the air conditioner and could cause product malfunction or damage.

■ **Do not insert hands or other objects through air inlet or outlet while the product is operated.**

- **Do not drink the water drained from the product.**
- **Use a firm stool or ladder when cleaning or maintaining the product.**

Be careful and avoid personal injury.

■ **Replace the all batteries in the remote control with new ones of the same type. Do not mix old and new batteries or different types of batteries.**

There is risk of fire or explosion.

- **Do not recharge or disassemble the batteries. Do not dispose of batteries in a fire.**

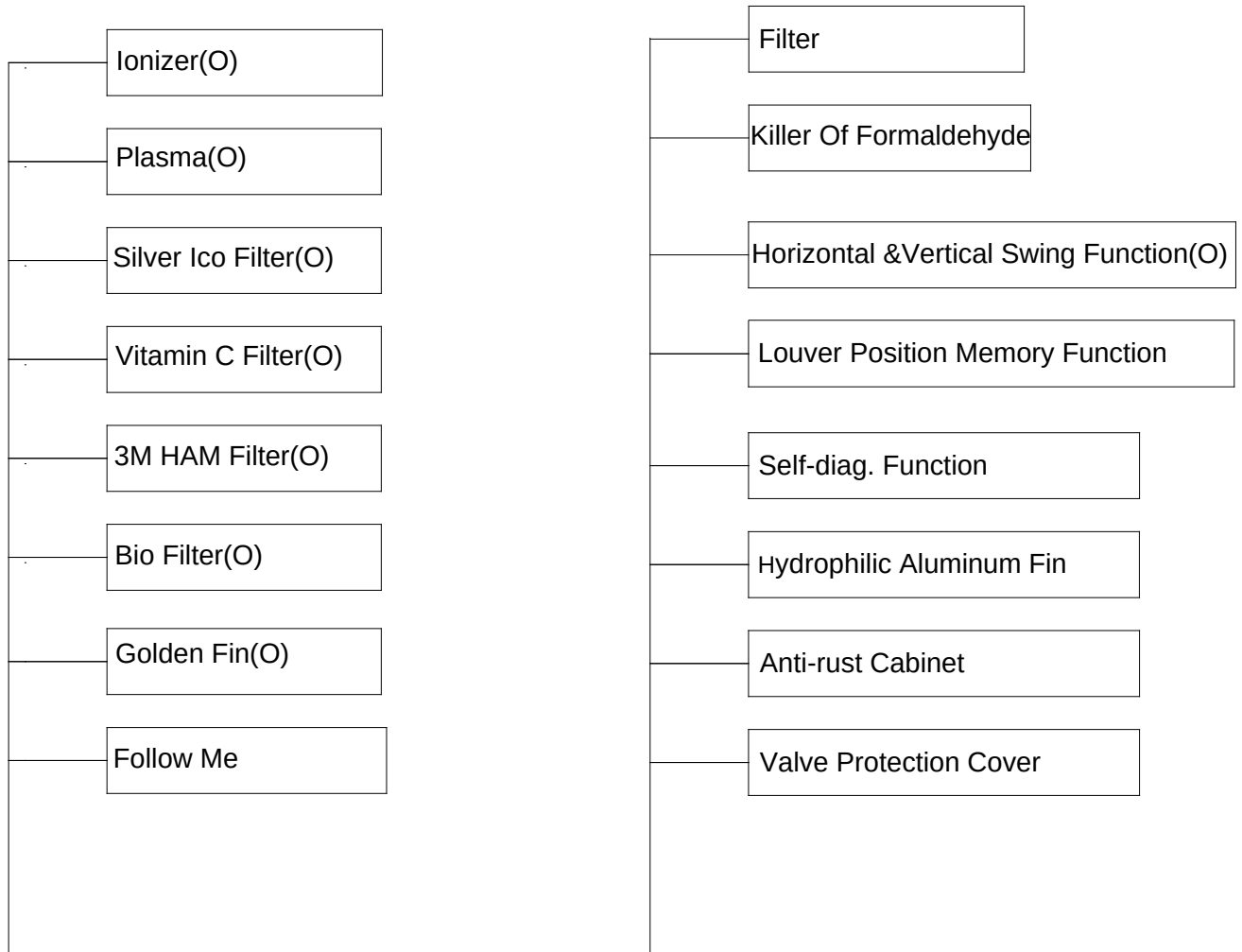
They may burn or explode.

■ **If the liquid from the batteries gets onto your skin or clothes, wash it well with clean water. Do not use the remote if the batteries have leaked.**

2. Function

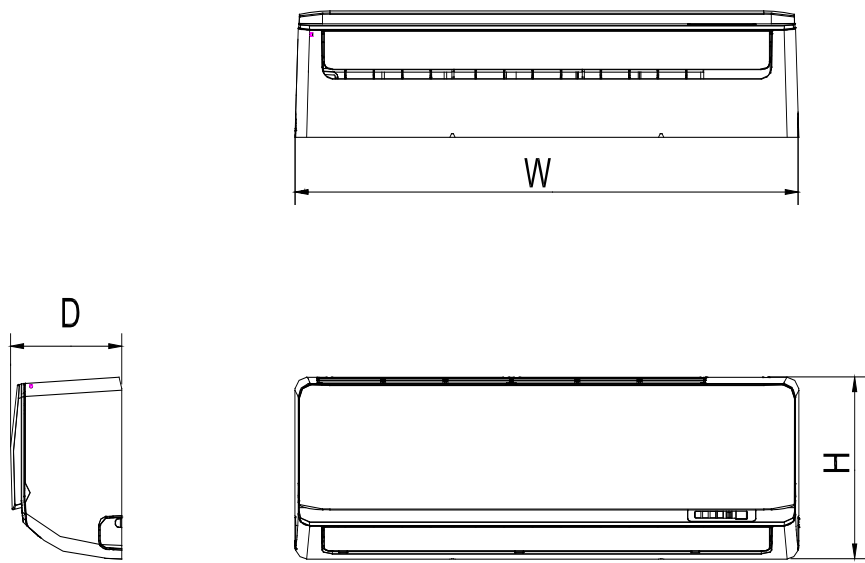
Model Names of Indoor Units

DC Inverter	Capacity	Indoor units
	7K	KS11MI-07HRFN1-QW
	9K	KS11MU-09HRFN1-QRC8W(B)
	12K	KS11MU-12HRFN1-QRC8W(B)
	18K	KS11MU-18HRFN1-QRC8GW

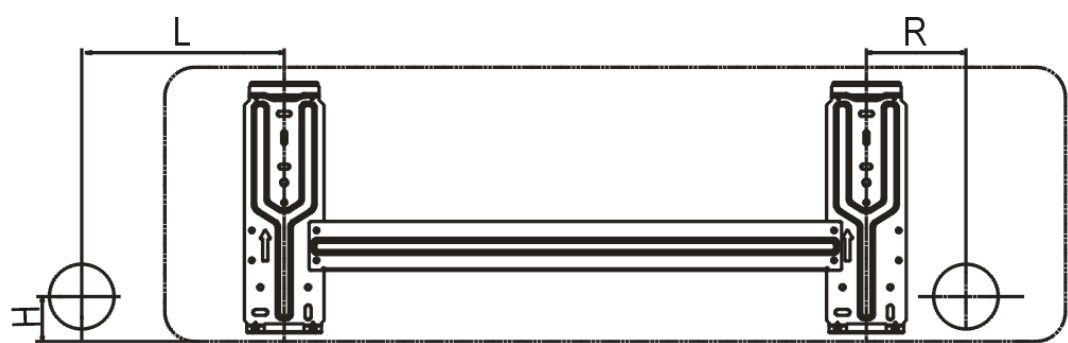


O: optional function

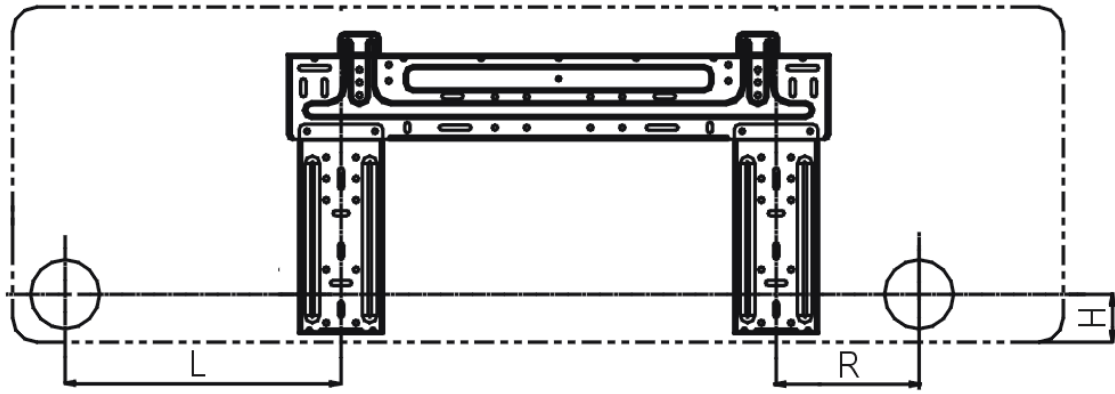
3. Dimension



Model	W	D	H
KS11MI-07HRFN1-QW	750	198	280
KS11MU-09HRFN1-QRC8W(B)	750	198	280
KS11MU-12HRFN1-QRC8W(B)	835	198	280
KS11MU-18HRFN1-QRC8GW	990	218	315



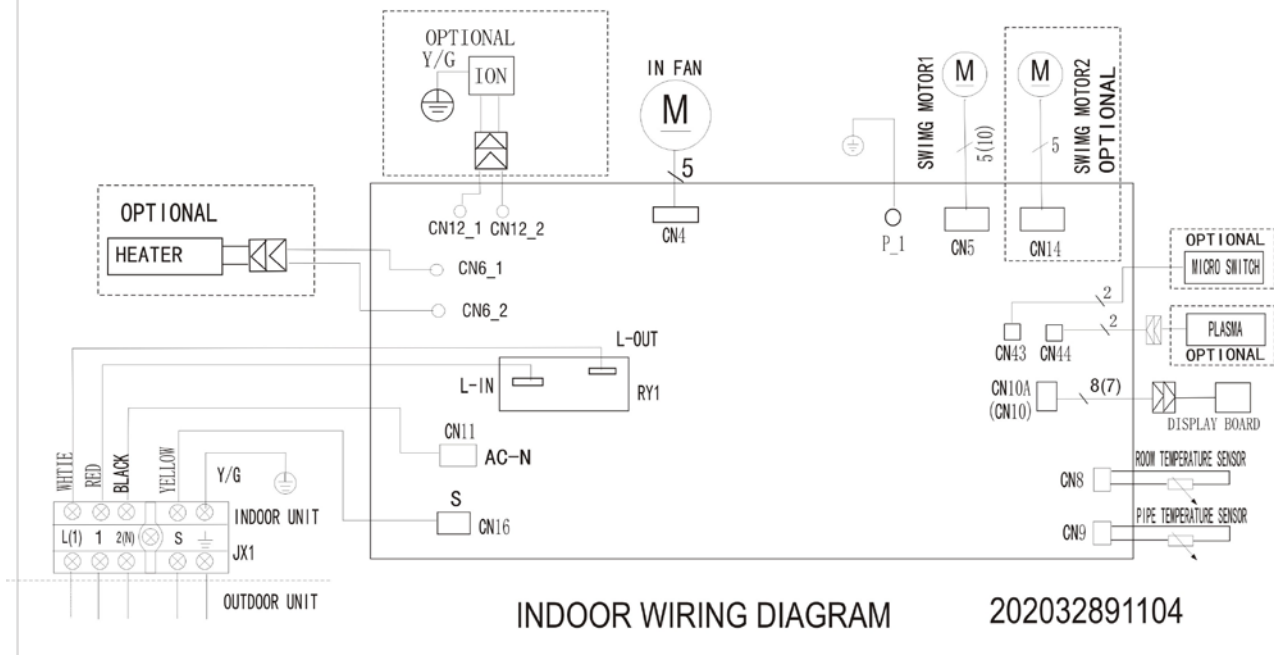
Model	L(mm)	R(mm)	H(mm)	Dimension of installation hole(mm)
KS11MU-09HRFN1-QW	180	110	45	∅ 65
KS11MU-09HRFN1-QW	180	110	45	
KS11MU-12HRFN1-QW	140	110	45	



Model	L(mm)	R(mm)	H(mm)	Dimension of installation hole(mm)
KS11MU-18HRFN1-QW	260	135	45	∅ 65

4. Wiring Diagram

NOTE: If used as MONO unit, for the standby control needs, the cross section area of cable connected to L(1), 1, 2(N) must be sufficient for the maximum system current. The maximum system current is equal to the sum of indoor unit and outdoor unit rated current. If used as MULTI unit, L(1) on the terminal block does not need to be connected.



5. Operation Characteristics

Temperature Mode	Cooling operation	Heating operation	Drying operation
Room temperature	$\geq 17^{\circ}\text{C}$	$\leq 30^{\circ}\text{C}$	$\geq 17^{\circ}\text{C}$
Outdoor temperature	$0^{\circ}\text{C} \sim 50^{\circ}\text{C}$	$-15^{\circ}\text{C} \sim 24^{\circ}\text{C}$	$0^{\circ}\text{C} \sim 50^{\circ}\text{C}$
	$-15^{\circ}\text{C} \sim 50^{\circ}\text{C}$ (For the models with low temperature cooling system)		

CAUTION:

1. If the air conditioner is used beyond the above conditions, certain safety protection features may come into operation and cause the unit to operate abnormally.

2. The room relative humidity should be less than 80%. If the air conditioner operates beyond this figure, the surface of the air conditioner may attract condensation. Please set the vertical air flow louver to its maximum angle (vertically to the floor), and set HIGH fan mode.

3. The optimum performance will be achieved during this operating temperature zone.

6. Electronic function

6.1 Abbreviation

T1: Indoor room temperature

T2: Coil temperature of evaporator

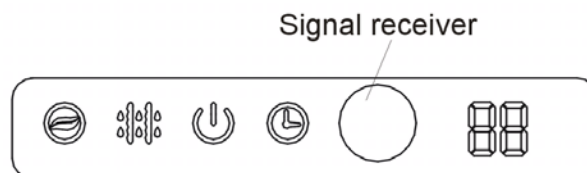
T3: Coil temperature of condenser

T4: Outdoor ambient temperature

T5: Compressor discharge temperature

6.2 Display function

6.2.1 Icon explanation on indoor display board.



	ION indication lamp(optional function): This lamp illuminates when Clean Air feature is activated.
	DEFROST indication lamp(For cooling & heating models only): Lights up when the air conditioner starts defrosting automatically or when the warm air control feature is activated in heating operation.
	OPERATION indication lamp: This lamp illuminates when the air conditioner is in operation.
	TIMER indication lamp: Lights up during Timer operation.
	Temperature indicator: Displays the temperature settings when the air conditioner is operational. Displays the malfunction code.

6.3 Main Protection

6.3.1 Time delay at restart for compressor

1 minute delay for the 1st time start-up and 3 minutes delay for others.

6.3.2 Temperature protection of compressor top

The unit will stop working when the compressor top temp. protector cut off, and will restart after the compressor top temp. protector restart.

6.3.3 Temperature protection of compressor discharge

When the compressor discharge temp. is getting higher, the running frequency will be limited as below rules:

---Compressor discharge temp. $T_5 > 115^{\circ}\text{C}$ for 5s, compressor stops and restarts up till $T_5 < 90^{\circ}\text{C}$

--- $110 < T_5 < 115^{\circ}\text{C}$, decrease the frequency to the lower level every 2 minutes.

--- $105 < T_5 < 110^{\circ}\text{C}$, keep running at the current frequency.

--- $T_5 < 105^{\circ}\text{C}$, no limit for frequency.

6.3.4 Fan Speed is out of control

When Indoor Fan Speed keeps too low (300RPM) for certain time, the unit will stop and the LED will display the failure

6.3.5 Inverter module protection

The Inverter module has a protection function about current, voltage and temperature. If these protections happen, the corresponding code will display on indoor unit and the unit will stop working.

6.3.6 Indoor fan delayed open function

When the unit starts up, the louver will be active immediately and the indoor fan will open 10s later.

If the unit runs in heating mode, the indoor fan will be also controlled by anti-cold wind function.

6.3.7 Compressor preheating functions

Preheating permitting condition:

If $T_4(\text{outdoor ambient temperature}) < 3^{\circ}\text{C}$ and the machine connects to power supply newly or if $T_4 < 3^{\circ}\text{C}$ and compressor has stopped for over 3 hours, the compressor heating cable will work.

Preheating mode:

A weak current flow through the coil of compressor from the wiring terminal of the compressor,

then the compressor is heated without operation.

Preheating release condition:

If $T_4 > 5^\circ\text{C}$ or the compressor starts running, the preheating function will stop.

6.3.8 Sensor protection at open circuit and breaking disconnection.

When there's one temperature sensor in malfunction, the air conditioner will display error code and will not stop immediately, to avoid the case that the air conditioner is in urgent need.

Fault temp. sensor	Operation in cooling, drying and fan only mode	Operation in heating mode
T1	Run supposed $T_1=26^\circ\text{C}$ high fan speed	Run supposed $T_1=26^\circ\text{C}$ high fan speed
T2	Refer to table 1	Refer to table 2
T3	Run with compressor frequency not higher than F14	3 minutes' defrosting every 40 minutes when $T_4 < 7^\circ\text{C}$; 2 minutes' defrosting every 90 minutes when $T_4 \geq 7^\circ\text{C}$.
T4	Run supposed $T_4=50^\circ\text{C}$	Run supposed $T_4=15^\circ\text{C}$
TP	Run supposed $T_4=50^\circ\text{C}$	Run supposed $T_4=15^\circ\text{C}$

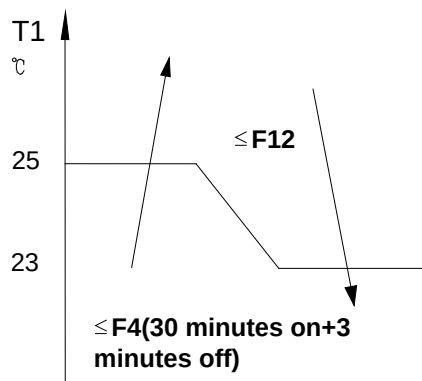


table 1

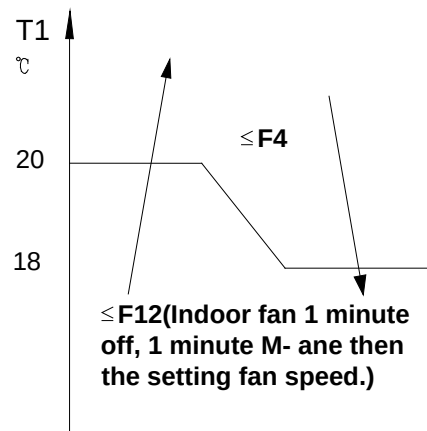


table 2

6.4.10 Refrigerant leakage detection

This function is only active in cooling mode. It can better prevent the compressor being damaged by refrigerant leakage or compressor overload.

Open condition:

Define the evaporator coil temp. T_2 of the compressor just starts running as T_{cool} .

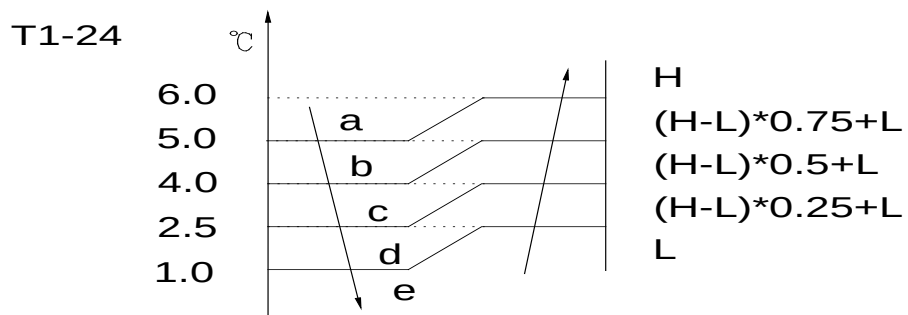
In the beginning 5 minutes after the compressor starts up, if $T_2 < T_{cool} - 2^\circ\text{C}$ does not keep continuous 4 seconds and this situation happens 3 times, the display area will show "EC" and

AC will turn off.

6.4 Operation Modes and Functions

6.4.1 Fan mode

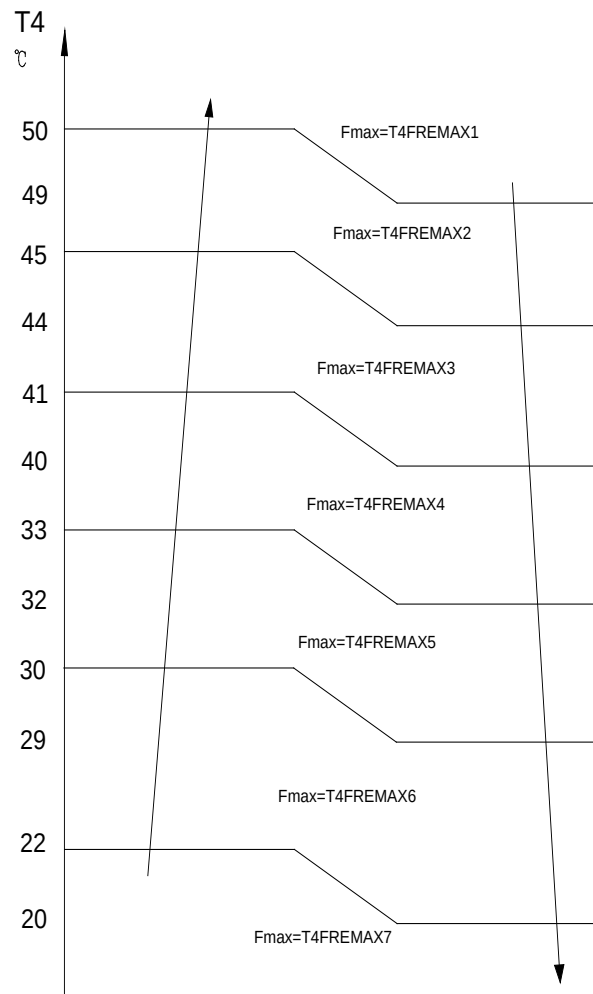
- (1) Outdoor fan and compressor stop.
- (2) Temperature setting function is disabled, and no setting temperature is displayed.
- (3) Indoor fan can be set to high/med/low/auto.
- (4) The louver operates same as in cooling mode.
- (5) Auto fan:



6.4.2 Cooling Mode

6.4.2.1 Compressor running rules

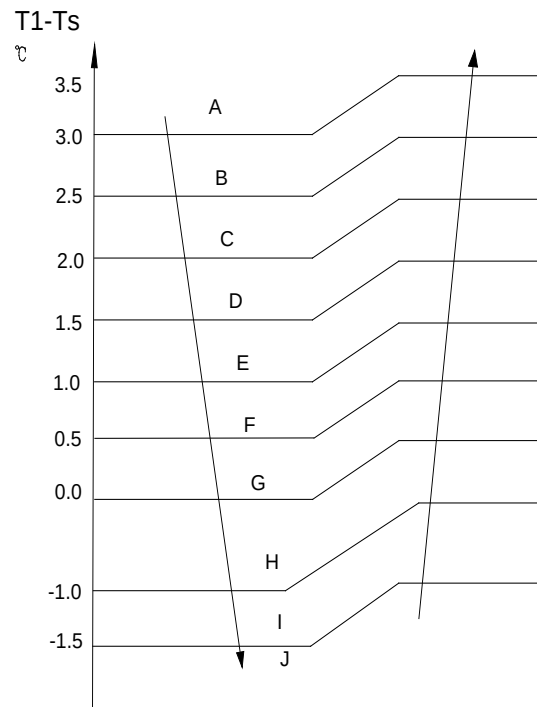
The maximum operation frequency of compressor after starting submits to following rule.



Meanwhile, the maximum frequency is limited by the indoor fan speed.

Indoor fan speed	Maximum frequency
High speed / turbo function	No limit
Silent mode	Fixed at F3

If users switch on AC by remote controller, the compressor will run at the Fmax frequency for 7 minutes according to the outdoor ambient temp. During the 7 minutes, the frequency limitation is active. 7 minutes later, the compressor running frequency will be controlled as below:



While the zones of A,B,C... are corresponding to different compressor running frequency.

Note:

When T1-Ts keeps in the same temp. zone for 3 minutes, the compressor will run as the below rules:

A: Increase the frequency to 3 grade higher until to FREMAX.

B~E: Increase the frequency to 2 grade higher until to FREMAX.

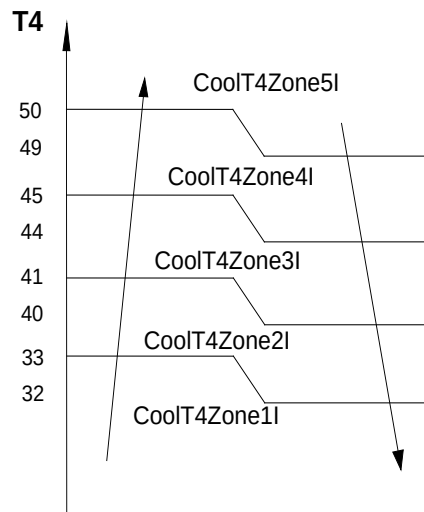
F~G: Increase the frequency to 1 grade higher until to FREMAX.

H: Keep the current frequency.

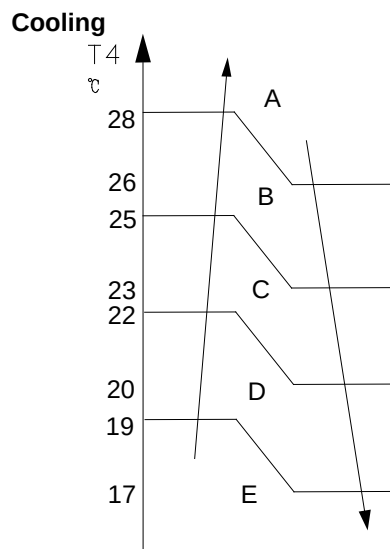
I: Decrease the frequency to 1 grade lower until to F1.

J: Run at F1 for 1h.(if $T1-Ts < -2^{\circ}\text{C}$, the compressor will stop)

Meanwhile, the compressor running frequency is limited by the current.



6.4.2.2 Outdoor fan running rules



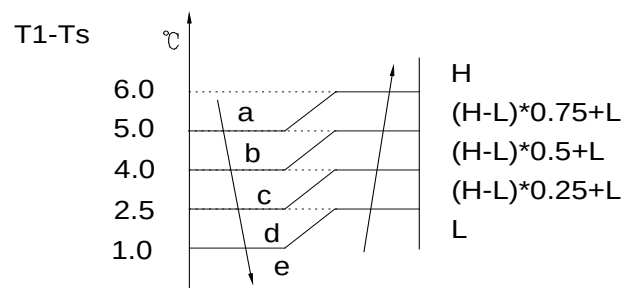
While A,B,C...means different fan speed of outdoor unit.

6.4.2.3 Indoor fan running rules

In cooling mode, indoor fan runs all the time and the speed can be selected as high, medium, low, auto and silent. When the compressor is running, the indoor fan is controlled as below:

Setting Fan speed	T1-Ts		Actual fan speed
H	4.5		$H+(H+=H+G)$
	3.0		$H (=H)$
	1.5		$H- (H-=H-G)$
M	4.5		$M+(M+=M+Z)$
	3.0		$M(M=M)$
	1.5		$M-(M-=M-Z)$
L	4.5		$L+(L+=L+D)$
	3.0		$L(L=L)$
	1.5		$L-(L-=L-D)$

The auto fan acts as below rules:



6.4.2.4 Condenser temperature protection

--- $55^{\circ}\text{C} < T3 < 60^{\circ}\text{C}$, the compressor frequency will decrease to the lower level until to F1 and then runs at F1. If $T3 < 54^{\circ}\text{C}$, the compressor will keep running at the current frequency.

--- $T3 < 52^{\circ}\text{C}$, the compressor will not limit the frequency and resume to the former frequency.

--- $T3 > 60^{\circ}\text{C}$ for 5 seconds, the compressor will stop until $T3 < 52^{\circ}\text{C}$.

6.4.2.5 Evaporator temperature protection

--- $T2 < 0^{\circ}\text{C}$, the compressor will stop and restart when $T2 \geq 5^{\circ}\text{C}$.

--- $0^{\circ}\text{C} \leq T2 < 4^{\circ}\text{C}$, the compressor frequency will be limited and decreased to the lower level

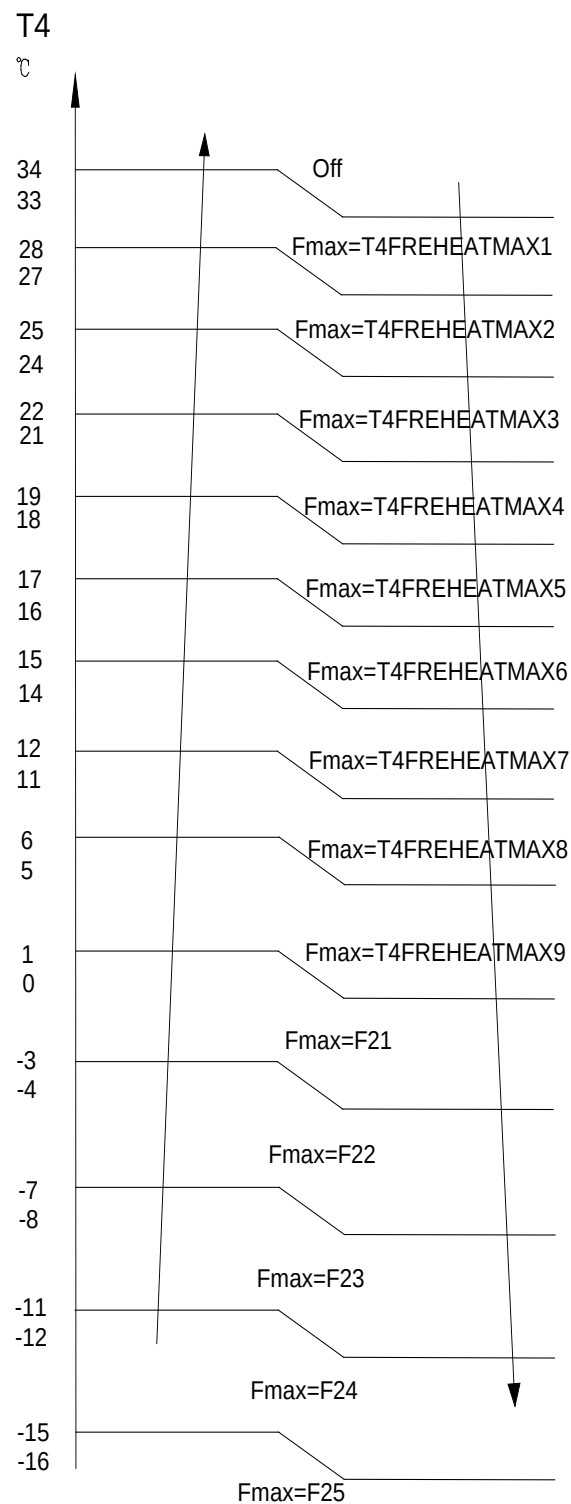
--- $4^{\circ}\text{C} \leq T2 \leq 7^{\circ}\text{C}$, the compressor will keep the current frequency.

--- $T2 > 7^{\circ}\text{C}$, the compressor frequency will not be limited.

6.4.3 Heating Mode

6.4.3.1 Compressor running rules

The maximum operation frequency of the compressor after starting submits to the following rule.

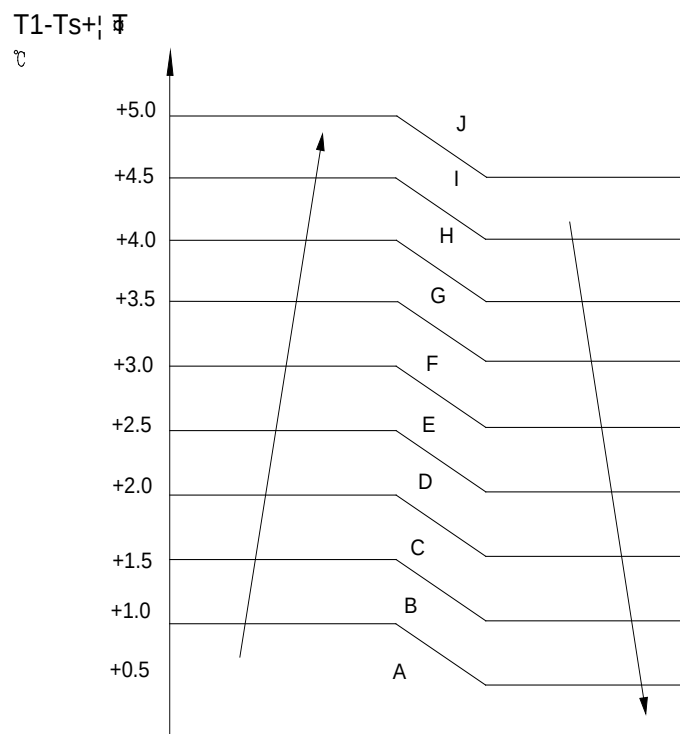


Meanwhile, the maximum frequency is limited by the indoor fan speed.

Indoor fan speed	Maximum frequency
High speed/8 degree heating/ turbo function	No limit
Medium speed	FHeatMaxMidFan
Low speed/sleep mode	FHeatMaxLowFan
Silent mode	Fixed at F3

If users switch on AC by remote controller, the compressor will run at the Fmax frequency for 7 minutes according to outdoor ambient temp. During the 7 minutes, the frequency limitation is active.

7 minutes later, the compressor running frequency will be controlled as below:



While the zones of A,B,C... are corresponding to different compressor running frequency.

$\Delta T = 0^\circ\text{C}$ as default.

Note:

When $T1-Ts$ keeps in the same temp. zone for 3 minutes, the compressor will run as the below rules:

A: Increase the frequency to 3 grade higher until to FREMAX.

B~E: Increase the frequency to 2 grade higher until to FREMAX.

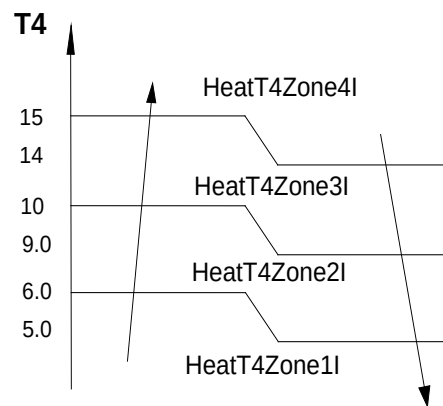
F~G: Increase the frequency to 1 grade higher until to FREMAX.

H: Keep the current frequency.

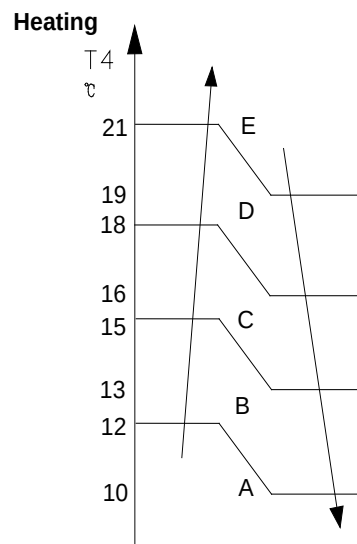
I: Decrease the frequency to the 1 grade lower until to F1.

J: Run at F1 for 1h.(if $T_1 - T_s - \Delta T > 6^\circ\text{C}$, the compressor will stop)

Meanwhile, the compressor running frequency is limited by the current.



6.4.3.2 Outdoor fan running rules



6.4.3.3 Indoor fan running rules

In heating mode, indoor fan can be selected as high, medium, low, auto and silent. The anti-cold-wind function is preferential. The running rules of anti-cold-wind function depend on both T1 and T2 that is more comfortable control.

When the compressor is running, the indoor fan is controlled as below:

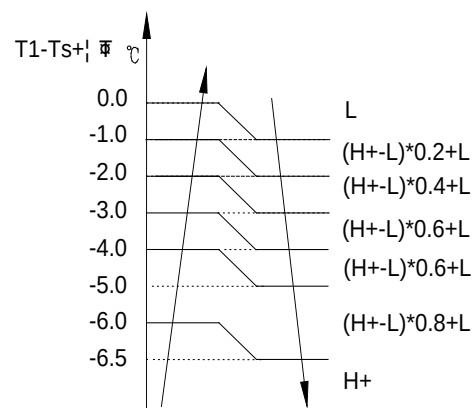
Setting fan speed	T1-Ts		Actual fan speed
H	-1.5		H- (H=H-G)
	-3.0		H (=H)
	-4.5		H+(H+=H+G)
M	-1.5		M-(M-=M-Z)
	-3.0		M(M=M)
	-4.5		M+(M+=M+Z)
L	-1.5		L-(L-=L-D)
	-3.0		L(L=L)
	-4.5		L+(L+=L+D)

If the compressor stops caused by the room temperature rising, the indoor fan will be forced to run

127

seconds with breeze. During this period, the anti-cold-wind is disabled.

Auto fan action in heating mode:



6.4.3.4 Defrosting mode

Condition of defrosting:

If any one of the following items is satisfied, AC will enter the defrosting mode.

After the compressor starts up and keeps running, mark the minimum value of T3 from the 10th minutes to 15th minutes as T30.

1) If the compressor cumulate running time is up to 29 minutes and $T3 < TCDI1$, $T3 + T30SUBT3ONE \leq T30$.

2) If the compressor cumulate running time is up to 35 minutes and $T3 < TCDI2$, $T3 + T30SUBT3TWO \leq T30$.

3) If the compressor cumulate running time is up to 29 minutes and $T3 < TCDI3$ for 3 minutes.

4) If the compressor cumulate running time is up to 120 minutes and $T3 < -15^{\circ}\text{C}$.

Condition of ending defrosting:

If any one of the following items is satisfied, the defrosting will finish and the machine will turn to normal heating mode.

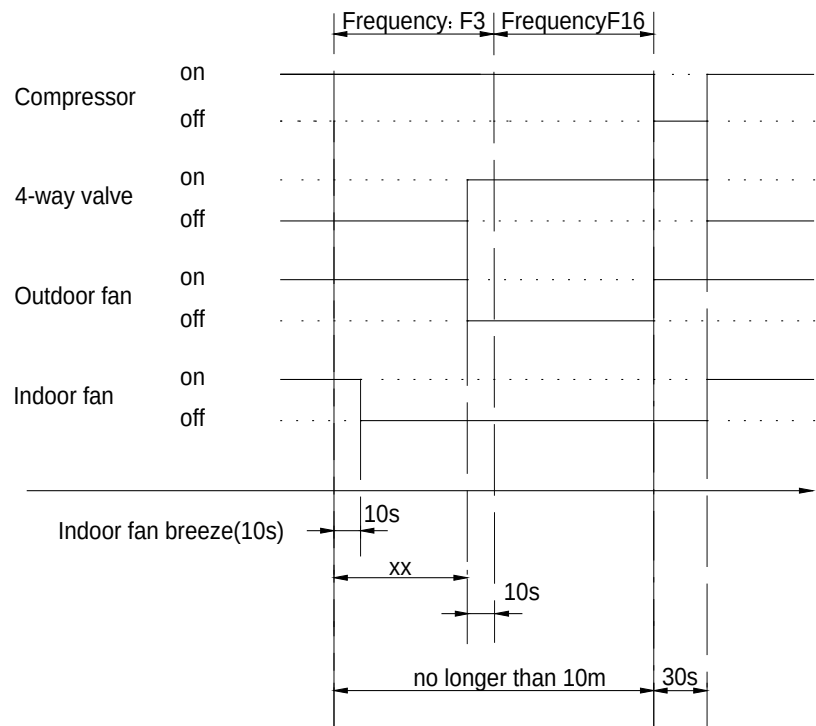
----T3 rises to be higher than $TCDE1^{\circ}\text{C}$.

----T3 keeps to be higher than $TCDE2^{\circ}\text{C}$ for 80 seconds.

----The machine has run for 10 minutes in defrosting mode.

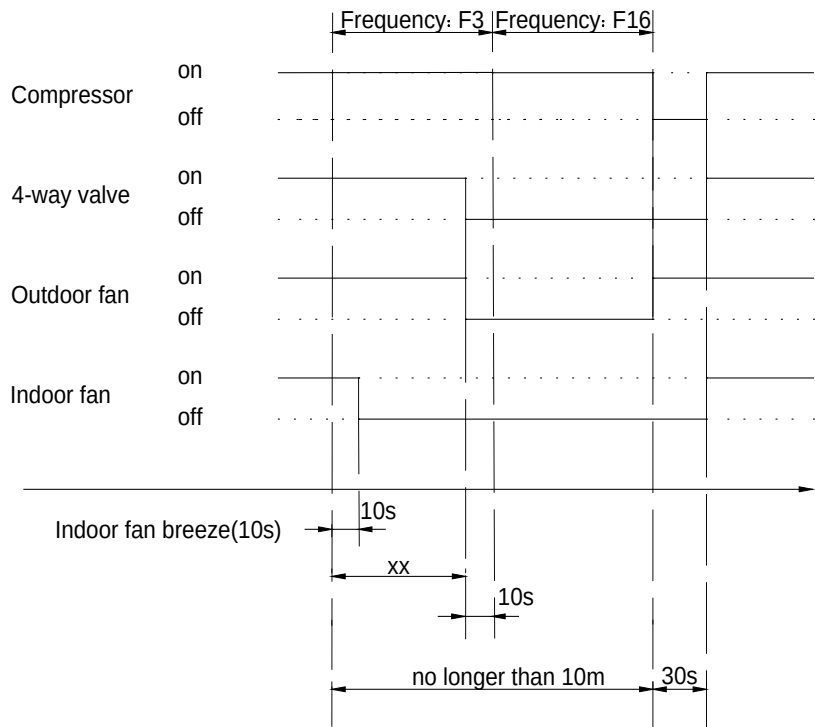
Defrosting action:

For KS11MI-07HRFN1-QW, KS11MU-09HRFN1-QRC8W(B), KS11MU-12HRFN1-QRC8W(B)



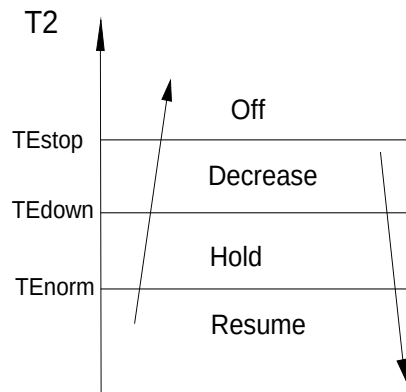
xx=60s

For KS11MU-18HRFN1-QRC8GW



xx=60s

6.4.3.5 Evaporator coil temperature protection



Off: Compressor stops.

Decrease: Decrease the running frequency to the lower level.

Hold: Keep the current frequency.

Resume: No limitation for frequency.

6.4.4 Auto-mode

This mode can be chosen with remote controller and the setting temperature can be changed between 17~30°C.

In auto mode, the machine will choose cooling, heating or fan-only mode according to ΔT ($\Delta T = T1 - Ts$).

$\Delta T = T1 - Ts$	Running mode
$\Delta T > 1^\circ\text{C}$	Cooling
$-1 < \Delta T \leq 1^\circ\text{C}$	Fan-only
$\Delta T \leq -1^\circ\text{C}$	Heating

Indoor fan will run at auto fan of the relevant mode.

The louver operates same as in relevant mode.

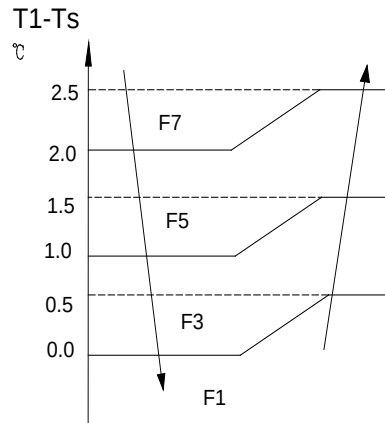
If the machine switches mode between heating and cooling, the compressor will keep stopping for 15 minutes and then choose mode according to $T1 - Ts$.

If the setting temperature is modified, the machine will choose running function again.

6.4.5 Drying mode

6.4.5.1 Indoor fan speed is fixed at breeze and can't be changed. The louver angle is the same as in cooling mode.

6.4.5.2 Compressor running rules



6.4.5.3 Low indoor room temperature protection

In drying mode, if room temperature is lower than 10°C, the compressor will stop and not resume until room temperature exceeds 12°C.

6.4.5.4 Evaporator anti-freezing protection, condenser high temperature protection and outdoor unit frequency limit are active and the same as that in cooling mode.

6.4.5.5 The outdoor fan operates the same as in cooling mode.

6.4.6 Forced operation function

6.4.6.1 Enter forced operation function:

When the machine is off, pressing the touch button will carry the machine to forced auto mode. If pressing the button once again within 5 seconds, the machine will turn into forced cooling mode.

In forced auto, forced cooling or any other operation mode, pressing touch button will turn off the machine.

6.4.6.2 In forced operation mode, all general protections and remote control are available.

6.4.6.3 Operation rules:

Forced cooling mode:

The compressor runs at F2 frequency and indoor fan runs as breeze. After running for 30 minutes. the machine will turn to auto mode as 24°C setting temperature.

Forced auto mode:

The action of forced auto mode is the same as normal auto mode with 24°C setting temperature.

6.4.7 Timer function

6.4.7.1 Timing range is 24 hours.

6.4.7.2 Timer on. The machine will turn on automatically when reaching the setting time.

6.4.7.3 Timer off. The machine will turn off automatically when reaching the setting time.

6.4.7.4 Timer on/off. The machine will turn on automatically when reaching the setting “on” time, and then turn off automatically when reaching the setting “off” time.

6.4.7.5 Timer off/on. The machine will turn off automatically when reaching the setting “off” time, and then turn on automatically when reaching the setting “on” time.

6.4.7.6 The timer function will not change the AC current operation mode. Suppose AC is off now, it will not start up firstly after setting the “timer off” function. And when reaching the setting time, the timer LED will be off and the AC running mode has not been changed.

6.4.7.7 The setting time is relative time.

6.4.8 Sleep function mode

6.4.8.1 Operation time in sleep mode is 7 hours. After 7 hours the AC quits this mode and turns off.

6.4.8.2. Operation process in sleep mode is as follow:

When cooling, the setting temperature rises 1°C (be lower than 30°C) every one hour, 2 hours later the setting temperature stops rising and indoor fan is fixed as low speed.

When heating, the setting temperature decreases 1°C (be higher than 17°C) every one hour, 2 hours later the setting temperature stops rising and indoor fan is fixed as low speed. (Anti-cold wind function has the priority)

6.4.6.3 Timer setting is available

6.4.6.4 When user uses timer off function in sleep mode (or sleep function in timer off mode), if the timing is less than 7 hours, sleep function will be cancelled when reaching the setting time. If the timing is more than 7 hours, the machine will not stop until reaches the setting time in sleep mode.

6.4.9 Auto-Restart function

The indoor unit is equipped with auto-restart function, which is carried out through an auto-restart module. In case of a sudden power failure, the module memorizes the setting conditions before the power failure. The unit will resume the previous operation setting (not including swing function) automatically after 3 minutes when power returns.

If the memorization condition is forced cooling mode, the unit will run in cooling mode for 30 minutes and turn to auto mode as 24°C setting temp.

If AC is off before power off and AC is required to start up now, the compressor will have 1 minute delay when power on. Other conditions, the compressor will have 3 minutes delay when restarts.

6.4.10 8°C Heating (optional)

In heating operation, the preset temperature of the air conditioner can be as low as 8°C, which keeps the room temperature steady at 8°C and prevents household things freezing when the house is unoccupied for a long time in severe cold weather.

6.4.11 Follow me (optional)

- 1) If the indoor PCB receives the signal which results from pressing the FOLLOW ME button on remote controller, the buzzer will emit a sound and this indicates the follow me function is initiated. But when the indoor PCB receives signal which sent from remote controller every 3 minutes, the buzzer will not respond. When the unit is running with follow me function, the PCB will control the unit according to the temperature from follow me signal, and the temperature collection function of room temperature sensor will be shielded, but the error detective function of room temperature sensor will be still valid.
- 2) When the follow me function is available, the PCB will control the unit according to the room temperature from the remote controller and the setting temperature.
- 3) The PCB will take action to the mode change information from remote controller signal, but it will not be affected by the setting temperature.
- 4) When the unit is running with follow me function, if the PCB doesn't receive any signal from remote controller for 7 minutes or pressing FOLLOW ME button again, the follow me function will be turned off automatically, and the temperature collection function of room temperature sensor will be available, the PCB will control the unit according to the room temperature detected from its own room temperature sensor and setting temperature.

6.4.12 Self-clean (optional)

For heat pump models which are provided with this function, after running in cooling or drying mode, if the user presses "Self Clean" button on remote controller, firstly, indoor unit runs in fan only mode for a while, then low heat operation and finally runs in fan only again. This function can keep the inside of indoor unit dry and prevent breeding of mold.

6.4.13 Refrigerant Leakage Detection

With this new technology, the display area will show "EC" when the outdoor unit detects refrigerant leakage.

6.4.14 Louver Position Memory Function

When starting the unit again after shutting down, its louver will restore to the angle originally set by

the user, but the precondition is that the angle must be within the allowable range, if it exceeds, it will memorize the maximum angle of the louver. During operation, if the power fails or the end user shuts down the unit in the turbo mode, the louver will restore to the default angle.

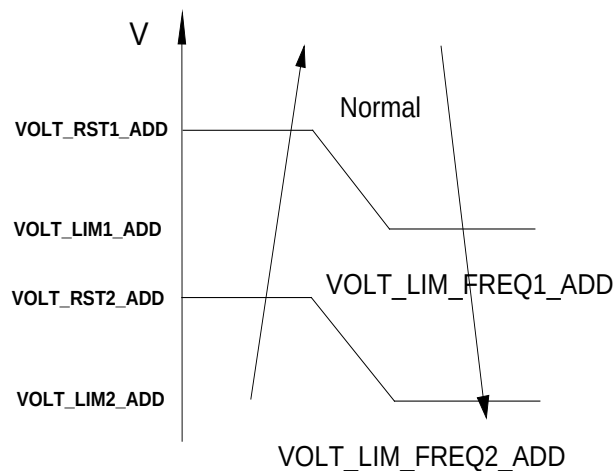
6.4.15 INTELLIGENT EYE(optional)

With the built-in infrared sensor, the indoor unit detects human movement. The AC will turn off if you leave the room for 30 minutes and turn on automatically when you come back, which helps saving more energy.

6.4.16 Silence operation (optional)

Press the “silence” button on remote controller to initiate SILENCE function. When the Silence function is activated, the compressor running frequency will keep lower than F2 and the indoor unit will bring faint breeze, which will reduce the noise to the lowest level and create a quiet and comfortable room for you.

6.4.17 Frequency limitation protection



The PCB will detect the voltage of power supply and adjust the compressor running frequency to protect the system.

In the first 10 seconds after power on, this protection is inactive.

When this protection happens, it will last 3 minutes and then the PCB will detect the power supply voltage again.

6.4.18 Mode conflict

The indoor units cannot work cooling mode and heating at same time.

Heating mode has a priority.

6.4.18.1 Definition:

	Cooling mode	Heating Mode	Fan	Off
Cooling mode	No	Yes	No	No
Heating Mode	Yes	No	Yes	No
Fan	No	Yes	No	No
Off	No	No	No	No

No: No mode conflict;

Yes: Mode conflict

6.4.18.2 Unit action

- Suppose Indoor unit A working in cooling mode or fan mode, and indoor unit B is set to heating mode, then A will change to off and B will work in heating mode.

Suppose Indoor unit A working in heating mode, and indoor unit B is set to cooling mode or fan mode, then B will change to stand by and A will be no change.